PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ta-Shuang Kuan, Chia-Tsung Chan, Chia-Te Lin

5 Appl. No.: 10/710,506 Filing Date: 07/16/2004

Patent No.: 7,215,391 Issue Date: 05/08/2007

Docket No.: NAUP0588USA Confirmation No.: 4505

Title: LIQUID CRYSTAL ON SILICON DISPLAY WITH MICRO COLOR

FILTERS POSITIONED ON THE TOP SURFACE OF THE

TRANSPARENT SUBSTRATE

To: Commissioner for Patents

P.O. BOX 1450

15 Alexandria, VA 22313-1450

Subject: Submission of Prior Art under 37 CFR §1.501

Dear Sir,

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This is a submission of prior art under 37 CFR §1.501. The applicants wish to make of record each of the documents listed on the accompanying form PTO/SB/42.

25 The cited reference contained in this submission was first cited in the Office action mailed on March 30, 2007 against the counterpart China patent application No. 2004100709599, which are no more than three months prior to the filing of the citation of prior arts. The cited references contain China patents CN 1360220A, CN 2514447Y, and CN 1470909A. Copies of the three patents and an English-language equivalent US patent No. 6,909,479 of CN 1360220A are submitted and also listed

in the form PTO/SB/42.

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According to the requirement set forth in 37 CFR 1.98(a)(3) and MPEP 609.04(a) III, English language abstract of cited references CN 2514447Y and CN 1470909A is included herewith to fulfill the concise explanation requirement.

CN 2514447Y (filed June 26, 2001)

The miniature reflecting colour display device includes a silicon substrate with CMOS structures, an array of metal reflective layers, a lower alignment film, a liquid crystal layer, an upper alignment film, a transparent conductive layer, and a glass substrate stacked from bottom to top to be packaged as a display device. The display device also includes micro color filters with three colors arranging as an array, positioned between the upper alignment film and the transparent conductive layer. The optical system of a color projector can be simplified according to the display device, which also provides advantages of low volume, low cost, and high reliability to the color projector.

CN 1470909A (filed July 26, 2002)

The main point of the invention is that a liquid crystal layer is setup between the upper and lower insulated base plates; a half-reflection film layer is coated on the lower insulated base plate. A color light filter layer constituted by photoresistive with high color saturation and a resin protective layer are formed on the half-reflection film in sequence. A total reflection film is coated on the protective layer. Finally, patternizing total reflection film is carried out.

Respectfully submitted,

Wunton Han	
C C C C C C C C C C C C C C C C C C C	Date: 2007/6/27

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Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)

PTO/SB/42 (09-06) Approved for use through 03/31/2007. OMB 0651-0031

U.S. Patent and Trademark Office; U. S. DEPARTMENT OF COMMERCE

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37 CFR 1.501 INFORMATION DISCLOSURE CITATION IN A PATENT (Sheet1of1)			NAUP0588USA		7,215,391			
			Applicant					
			UNITED MICROELECTRONICS CORP. Issue Date Art Unit					
			05/08/2007		2871			
			U.S. PATE	NT DOCUMENTS				, and the second
EXAMINER INITIAL	DOCUMENT NUMBER	DATE		NAME CLASS		SUBCLASS	FILING DATE IF APPROPRIATE	
	6,909,479	06/21/2005	IIJIMA		G02P	1/1335	12/10/2001 12/08/1995	
TANKS AT	5,682,215	10/28/1997	Nishihara		G02F	1/1335		
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		FC	REIGN PAT	TENT DOCUMENTS				
	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
	CN 1360220A	07/24/2002	CN		G02F	1/133	V	110
	CN 1470909A		CN		G02F	1/1333	V	·
	CN 2514447Y	10/02/2002	CN		G09G	1/28	V	
	OTHER DO	CUMENTS (Including A	uthor, Title, Date, F	Pertinent Pag	es, Etc.)		
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This collection of information is required by 37 CFR 1.501. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.